

**DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch  
690 Walnut Ave.St. 150  
Vallejo, CA 94592-1133  
(707) 649-5453  
(707) 649-5493

Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:** Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-001227**Date Inspected:** 15-Jan-2008**Project Name:** SAS Superstructure**OSM Arrival Time:** 630**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1900**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Changxing Island**CWI Name:** Xu Le Feng**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** OBG, 89 Mock-up**Summary of Items Observed:**

Caltrans Quality Assurance (QA) Inspector, Larry Viars was present to observe welding operations of the Orthotropic Box Girder (OBG), 77 and 89 meter Mock-up, for the San Francisco Oakland Bay Self Anchored Suspension Bridge, at Zhenhua Port Machinery Company (ZPMC) facility on Changxing Island.

Caltrans QA Inspector Viars observed ZPMC welder Mr. Xia Yongliu performing Submerged Arc Welding (SAW) on the 77.00 meter Mock-up weld # 13B. Welding appeared to be in conformance with WPS-B-T-2221-C-U2b-S. The following welding variables were recorded, amperage 708, voltage 32.5, travel speed 646 mm/min. and a heat input of 2.14 Kj/mm.

Caltrans QA Inspector Viars observed Mr. Shi Yan Hao performing Flux Cored Arc welding (FCAW) of the 89.00 meter Mock-up Built up Channel sub assembly MA31 weld # 7. The following welding variables were recorded, amperage 283, voltage 30.2, travel speed 305 mm/min. with a heat input of 1.68 Kj/mm.

Caltrans QA Inspector Viars observed Gantry Machine Flux Cored Arc Welding of the OBG side plate SP009 welds SP009-01-018, 019, 022, 023, 026 and 027. The following ZPMC welders were observed Mr. Li Shuiliang (026, 027), Mr. Xin Meng (22, 23), Mr. Li Xue Hua (18, 19). Welding variables appeared to be in conformance with the WPS-B-T-2132.

Caltrans QA Inspector Viars found that the above mentioned welding appeared to be in conformance with AWS D1.5.

---

## WELDING INSPECTION REPORT

( Continued Page 2 of 2 )

---

### Summary of Conversations:

As identified within the contents of this report.

### Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Mazen Wahbeh, (818) 292-0659, who represents the Office of Structural Materials for your project.

---

<b>Inspected By:</b>	Viars,Larry	Quality Assurance Inspector
----------------------	-------------	-----------------------------

---

<b>Reviewed By:</b>	Cuellar,Robert	QA Reviewer
---------------------	----------------	-------------